

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

in re the Appln. Of

Inventor(s): Karl A. Miller

Group Art Unit: 2681

Application No.: 10/628,603

Confirmation No.: 4642

Filing Date: July 28, 2003

Attorney Docket No.: Cognio63US3

Title: SYSTEM AND METHOD FOR CLASSIFYING SIGNALS USING TIMING  
TEMPLATES, POWER TEMPLATES AND OTHER TECHNIQUES

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Dear Sirs:

Pursuant to the duty of disclosure requirements of 37 CFR 1.56, this Information Disclosure Statement is being submitted for entry in the above-identified application. It is being filed before the undersign's knowledge of the mailing of the first Office Action on the merits. Thus, no fee is believed due.

Attached is a form PTO-1449, together with copies of the cited references. The Examiner's consideration of the references is respectfully requested.

Respectfully submitted,

D. Andrew Floam

Reg. No. 34,597

(Customer Number 32604)

Date: January 20, 2004

Cognio, Inc.  
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Phone: 301-944-1447  
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I, D. Andrew Floam, hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, PO Box 1450 Alexandria, VA 22313-1450



**COGNIO, INC.**  
 101 ORCHARD RIDGE DRIVE, SUITE 350  
 GAITHERSBURG, MARYLAND 20878

## LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.: Cognio63US3  
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## FOREIGN PATENT DOCUMENTS

<u>Examiner Initial</u>	<u>Document Number</u>	<u>Date</u>	<u>Country</u>	<u>Class/Subclass</u>	<u>Translation (Yes or No)</u>
AA	2260336	08/15/2000	Canada	CO1R 29/26	
AB	2298316	08/15/2000	Canada	H04B 1/16	
AC	JP 2000-022712	01/21/2000	Japan		Yes (Partial)

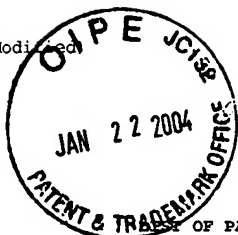
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## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

<u>*Examiner Initial</u>	<u>Author, Title, Date, Pertinent Pages, Etc</u>
BA	Agilent Publication, "Agilent 89400 Series Vector Signal Analyzer Product Overview," 2000.
BB	Agilent Publication, "Agilent Technologies: 2G & 3G Solutions-Accelerating Progress," 2002.
BC	Agilent Publication, "Agilent Technologies: Power Solutions To Complex Measurement Problems; Burst, Transient and Modulated Signal Analysis," 2000.
BD	Agilent Publication, "Agilent PN 89400-8 Using Vector Modulation Analysis In The Integration, Troubleshooting And Design Of Digital RF Communications Systems," 2000 (and earlier).
BE	Agilent Publication, "Agilent PN 89400-10 Time-Capture Capabilities Of The Agilent 89400 Series Vector Signal Analyzers," 2000 (and earlier).
BF	Agilent Publication, "Agilent 89440A-1 Frequency And Time-Selective Power Measurements With The Agilent 89410A and 89440A," 2001 (and earlier).
BG	Canadian Communications Research Center, "Spectrum Explorer Project Of Canadian Communications Research Center," 1998 (and later).
BH	Stanford Research Systems, "Stanford Research Systems SR785 Two Channel Dynamic Signal Analyzer," 1998.
BI	Carlemalm, Catharina, "Suppression Of Multiple Narrowband Interferers In A Spread-Spectrum Communication System," August, 2000, IEEE Journal on Selected Areas in Communications, Special Issue on Broadband Communications, Vol. 18.

Examiner Signature	Date Considered
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\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s)

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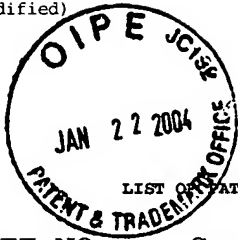
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<u>BJ</u>	Lo, Victor Yeeman, "Enhanced Spectral Analysis Tool (SAT) For Radio Frequency Interference Analysis And Spectrum Management," Milcom, 1998.
<u>BK</u>	Tektronix, "Real-Time Spectrum Analysis Tools Aid Transition To Third-Generation Wireless Technology," 1999.
<u>BL</u>	Patenaude, Francois et al., "Spectrum Surveillance: System Architecture," CRC-TN-97-001, Canadian Communications Research Centre, April 15, 1997.
<u>BM</u>	Mobilian Corporation, "WI-FI™ (802.11b) and BLUETOOTH™: an Examination of Coexistence Approaches," Mobilian Corporation, 2001.
<u>BN</u>	RSMS Publication, "Radio Spectrum Measurement System (RSMS) Program-Functional Measurements," January 29, 2001, 5 pages.
<u>BO</u>	Schreyogg, Christoph et al., "Robust Classification Of Modulation Types Using Spectral Features Applied To HMM," 1997, 5 pages.
<u>BP</u>	Tektronix, "Validation Testing Of Bluetooth Wireless LAN Systems," Tektronix Application Note, 2001.
<u>BQ</u>	Lallo, Pauli, "Signal Classification By Discrete Fourier Transform", Milcom Conference Proceedings, 1999.
<u>BR</u>	Quint et al., "Emitter Detection And Tracking Algorithm For A Wide Band Multichannel Direction-Finding System In The HF Band," Milcom Conference Proceedings, 1999.
<u>BS</u>	Dubuc et al., "An Automatic Modulation Recognition Algorithm For Spectrum Monitoring Applications," ICC '99, June 19, 1999.
<u>BT</u>	Shull et al., "Modulation Classification By Wavelet Decomposition Entropy Analysis1," ASME Press, Vol. 10, 15-20, November, 2000.
<u>BU</u>	Medav, Dr. Hans-Joachim Kolb, "Signal Processing and Neural Networks in Surveillance and Radio Monitoring," Medav, 1993, 20 pgs.
<u>BV</u>	Medav, "Medav OC-6040, PC-Based 4-Channel Analyzer And Demodulator For Narrowband COMINT Signals With Automatic Signal Recognition," publication date unknown, 8 pgs.
<u>BW</u>	BBN Technologies, "Using Signal Processing to Analyze Wireless Data Traffic," May 22, 2002, BBN Technical Memorandum No. 1321, prepared for DARPA.
<u>BX</u>	Medav, Dr. Hans-Joachim Kolb "Short Time Spectral Analysis of Audio Signals on a PC," unknown publication date, 6 pgs.

Examiner Signature		Date Considered	
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BY	Aglient Technologies, "Verifying Bluetooth™ Baseband Signals Using Mixed-Signal Oscilloscopes," 2001, Application Note 1333-3.
BZ	Medav, "Astrid: Analysis System for Telecom Signals, Recognition, Interception and Demodulation of HF/VHF/UHF Radio Signals from 0 to 2 GHz," 2000, 8 pgs.
CA	Gregory P. Noone, "A Neural Approach to Automatic Pulse Repetition Interval Modulation Recognition," 1999, Proceedings of Information Decision and Control.
CB	Nolan et al., "Modulation Scheme Recognition Techniques for Software Radio on a General Purpose Platform," unknown publication date, Networks and Telecommunications Research Group, Trinity College.
CC	Medav, "Astrid++: Analysis, Monitoring, Recording and Multi-Channel Direction Finding of Wideband Radio Signals," 2000.
CD	Taira et al., "Automatic Classification of Analogue Modulation Signals by Statistical Parameters," 1999, Milcom Conference Proceedings.
CE	Bart Rice et al., "Tutorial -C: Automatic Signal Classification," 1998, EUSIPCO Conference.
CF	Oscor, "Oscor 5000 (Omni-Spectral Correlator)," unknown publication date.
CG	Logicon Company Literature (Northrup Grumman), "Logicon Specific Emitter Identification," unknown publication date.
CH	Boudreau et al., "A Fast Automatic Modulation Recognition Algorithm And Its Implementation In A Spectrum Monitoring Application," October 2000, Milcom.
CI	Ketterer et al., "Classification of Modulation Modes Using Time-Frequency Methods," 1999, IC.
CJ	Nolan et al., "Modulation Scheme Classification for 4G Software Radio Wireless Networks," unknown publication date.
CK	PCT Search Report in International Application No. PCT/US03/13572, 6 pgs.

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